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JULY/AUGUST 1995



- Irrigation- A Look at the Future
- How to Manage Wildlife
- Special Olympics Fundraiser - What a Day!



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Michigan & Border Cities Golf Course Superintendents Association

The Official Publication of the Michigan and Border Cities Golf Course Superintendents Association

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Code Of Ethics

THE MBCGCCSA SUBSCRIBES TO THE CODE OF ETHICS AS SET FORTH IN THE GCSAA'S 1978 DIRECTORY. THIS CODE IS AS FOLLOWS:

- 1.1 Recognize and discharge all my responsibilities and duties in such a fashion as to be a credit to this Association and profession.
- 1.2 Practice and insist upon sound business and turf management principles in exercising the responsibilities of my position.
- 1.3 Utilize every practicable opportunity to expand my professional knowledge, thereby improving myself and my profession.
- 1.4 Maintain the highest standards of personal conduct to reflect credit and add to the stature of our chosen profession (golf course superintendent).
- 1.5 Base endorsements, either written or verbal by means of any medium, strictly upon satisfactory personal experiences with the item identified.
- 1.6 Refrain from encouraging or accepting considerations of any value without the express understanding of all parties that said consideration is available to all in similar circumstances, and that no actions shall be forthcoming as a result of acceptance.
- 1.7 Recognize and observe the highest standards of integrity in my relationships with fellow golf course superintendents and others associated with this profession and industry.
- 1.8 Assist my fellow superintendents in all ways consistent with my abilities, only when called upon to do so and with incumbent superintendent's knowledge, participation and acceptance.
- 1.9 Abstain from the debasement of, or encroachment upon, the professional reputation, practice or employment of another superintendent.
- 1.10 Lend my support to, and actively participate in, the efforts of my local Chapter and National Association to improve public understanding and recognition of the profession of golf course superintendency.
- 1.11 Abstain from any exploitation of my Association, industry or profession.
- 1.12 Present information and participate as a witness in all proceedings to which there exists evidence of a violation of this Code of Ethics.
- 1.13 Refrain from corresponding, either verbally or in writing with a Director, member or official of another Club regarding its affairs, without the prior consent of the Club's Superintendent.

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CALENDAR OF EVENTS



July 10-16

Seniors Players Championship at TPC
 Dearborn

July 18

Membership Meeting -
 The Majestic at Lake Walden

August 7

The Orchards - invite a member

August 17

Turf Field Day at Hancock Research Center,
 Michigan State University

September 11

Membership Meeting - Greystone

October 24

Annual Meeting - Maple Lane Golf Club

December 11

Year in Review - Birmingham Country Club



on par **with the** president



In this high-tech age where it seems like we have everything we need at our fingertips, there always are a few things that can't be arranged. I'm going to wiggle my nose and wish!

The weather in July and August is a whole lot better than the bad weather we had in April and May.

The skunks, moles and other varmints would take a summer vacation in Argentina.

My fairway mower would break down after the Men's Invitational instead of the day before.

My members would compliment me on the many flowers that lived instead of noticing the one that died.

My crew members didn't share their latest adventures each time they passed in the fairway.

Canadian geese could be stopped at the border before entering Michigan.

All ball marks repaired themselves on impact.

After spending five minutes lining up a putt, it would break the way I read it.

I had the energy to play the course after spending seven days a week preparing it for others.

The turf professors at MSU could biologically control slow play.

Trees really were 90 percent air.

My crew was as enthusiastic punching in as they are punching out.

People who pass me on the freeway, then immediately exit, would join the other varmints in Argentina.

Past Treasurer Debusscher would finally find a new name for the Michigan and Border Cities Golf Course Superintendents Association.

Sundays really were a day of rest.

My wish list cannot be complete without wishing all members of the MBCGCSA good Health, Happiness and Fast Grass.

Jay Delcamp



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Michigan Special Olympics 1995 *What a Day!*



Lake Orion Special Olympic athletes and chaperones having fun the day of the event.

For the 14th consecutive year the Michigan and Border Cities Golf Course Superintendents Association sponsored a wonderfully successful golf outing to benefit the Michigan Special Olympics. Friday, May 19, at Bald Mountain Golf Course in Lake Orion was a marvelous day. The weather was great, turnout good, with a field of 107 golfers, and we out-did ourselves by reaching our goal of \$12,500 for this worthwhile cause.

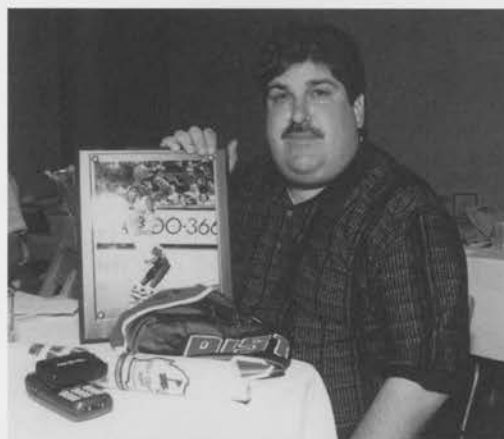
Tee Sponsorships by many of our vendors, the raffle, 50/50 drawing, prizes, golf events on individual holes (closest to pin, longest drive, etc.) and the sports memorabilia auction were part of the festivities that helped us reach our goal. A guest appearance by football great Ron Kramer, and a great group of "special" athletes made it a special, special day.

Sincere thanks to all who attended, those who donated prizes and funds and the Special Olympics Fund Raiser Committee: John Cooney, Howard Ellis, Don Fields, Tom Gill, Bill Hull, Keith Richards, Greg Seago and Tim Weathers, who worked so diligently to make this event another success story for MBCGCSA.

Paul Dushane and Ed Hock
Co-Chairmen, Special Olympics Committee



Guest Host Ron Kramer with special athlete Chris Audretsch during his talk after dinner.



Jim "The Cheeseman" Petracci displays the autographed Michael Jordan picture he purchased during the auction.



Al Trainor shows off his autographed Lou Whittaker baseball bat to Shelly Berry after the auction.

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Are We Going to Hell, Or is It Time to Disagree?

by Christopher Sann

This article first appeared in the May 1995 issue of *Turfgrass TRENDS* and is reprinted with permission of the author

The fragrance of freshly cut grass, blooming daffodils and hyacinths fills the warm air. My eyes are pleased by the sight of blossoming dogwoods, cherry trees and crabapples. Yet my ears are subjected to the haranguing of "environmental chicken littles," who, despite significant evidence to the contrary, repeatedly insist that no environmental progress has been made and that civilization is doomed to perish in a sterile hell of its own making. Opportunistic politicians, riding on a temporary wave of anti-governmental sentiment, say that government is wholly incompetent and incapable of successfully completing any activity it undertakes.

With both of these shrilly and emotionally avowed points of view, I loudly but politely disagree.

A substantial body of evidence that the environment is getting better is chronicled in a new book, *A Moment on Earth: The Coming Age of Environmental Optimism*, by Gregg Easterbrook (Viking Press). The book shows that these early efforts to stop poisoning ourselves and our planet have borne considerable fruit. The facts are as follows:

- * Since 1975, airborne lead levels have been reduced by 96 percent.
- * From 1988 to 1991, the number of people living in U.S. counties that failed federal air pollution standards fell from 100 million to 54 million.

- * From 1988 to 1993, smog warnings in east coast cities fell by 64 percent.
- * By the year 2000, the amount of sulfur dioxide emitted by U.S. electrical generating facilities and manufacturing plants will have been reduced from 28 million tons to nine million tons, or by 68 percent, even though the number of coal-fired electrical generating facilities has doubled since 1970.
- * The total forest acreage in the industrialized portion of the world has actually increased in the past 50 years, with a 30 percent increase in Vermont, Massachusetts and Connecticut since the mid-19th century.
- * A 10-year government study completed in 1991 found that there was no evidence of general decline in U.S. or Canadian forests due to acid rain, and that, despite estimates of high acidity in 50 percent of lakes, in fact only 4 percent of the lakes were found to have become acidified.

If there is evidence that the environment is getting better, then why all the noise?

Why do the hard-core doomsayers continue to discount reports of environmental progress? Most certainly some of the noise coming from environmentalists comes from a genuine sense of concern. But not all.

The rhetoric that served us all so well, to get our attention about the larger dangers of self-poisoning, now seems strangely discordant and out of proportion to the increasingly less infamous examples of self-destructive behavior that still remain. Unfortunately, their continued strident pronouncements about the end of the world are no longer being met with bemusement, befuddlement or tolerance—they are beginning to evoke a rather hostile retort from a sizable portion of the population that appears to be more concerned about individual rights than the collective good.

There have been excesses in the government's zeal to correct past practices that led to such infamous places as the Love Canal and the use of Agent Orange. But even these concerns about the excessive use of government regulation do not fully explain the level and the volume of vitriolic dialog that has taken center stage over the last 12 months.

continued on pg. 11

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What Does All This Have to Do with Turf?

Like it or not, all turfgrass managers have to abide by some level of government regulations, be they federal, state or local. As flawed as many of these regulations are, they are designed to protect workers, users and the environment. Turfgrass managers have accepted the fact that regulation is part of the business "landscape," and up until the last 12 months have had some idea where these regulations were heading.

Historically, as new regulations have been implemented, turfgrass managers ultimately have relied on the regulators for information and guidance. If federal funding is slashed, then the money needed to field implement these new regulations and fund extension agents and turfgrass research specialists to develop new strategies in turf management will diminish. The safety net of government support will weaken. Consequently turfgrass managers will be left to their own devices. Successfully navigating the ever changing regulatory and political shoals will become a major challenge, requiring untold dollars and man hours to comply. As bad as it may be, the future holds the possibility that it will get a whole lot worse.

What Can the Turfgrass Industry Do?

More now than ever before we in the turfgrass management industry must not only find our collective voice, we must loudly but politely disagree.

The 1990 U.S. census shows that the turfgrass management industry consists of 735,556 men and women. We are a strong force. We no longer can allow our industry's fate to be buffeted by outside forces, be they overzealous environmentalists, uninformed regulators, opportunistic politicians, bottom-line oriented manufacturers and suppliers or a biased media.

We must find our collective voice and tell the consumers/users that we are as concerned about the environment as they are. We must show them that we are actively looking at and implementing new management strategies that will reduce the amount of pesticides that we use.

We must, loudly but politely, tell everyone involved in

our field that we no longer take a back seat to the agricultural industry. We must let them know that we will no longer just blindly use the manufacturers' products and not ask questions. They must understand that if they continue to take us for granted and continue to ignore our needs, we will buy our "tools of the trade" from manufacturers who value our work and recognize us as partners in the industry.

**We must,
loudly but
politely,
object to
environmental
doomsayers,
government
groups and local
media who
have made it
a practice to pit
one side against
the other in
order to advance
their own
causes.**

We must loudly but politely tell our local, state and federal legislators that we must participate in formulating regulations affecting our industry. We must insist that legislatures and regulators clearly define goals for the future use of pesticides, that we expect legislators to keep the industry well-informed about these goals and that they must properly disseminate information relevant to our industry.

We must let the media—television, magazines and newspapers—know that we, loudly but politely, object to their common practice of building readership and ratings with sensational stories about how turfgrass managers are poisoning the world. Let them know that "we expect balanced coverage of our industry and that "pesticide horror stories" must be counterbalanced by reports of our advanced environmental work, such as integrated Pest Management. The media need to understand that we will monitor their stories, and if they do not comply with our request for fair reporting of our work, we will contact their advertisers and let them

know that we will boycott products advertised in media that reports unfairly about our industry.

We Must Loudly But Politely Make Our Voices Heard

We must, loudly but politely, object to environmental doomsayers, government groups and local media who have made it a practice to pit one side against the other in order to advance their own causes. We must demand to have a place in the decision-making process that charts our future course, and that all involved in regulating our industry provide us with accurate information so that we, as well as our customers, can make informed and sound environmental business decisions. The turfgrass industry of about three quarters of a million individuals must politely demand full and proper consideration and representation.

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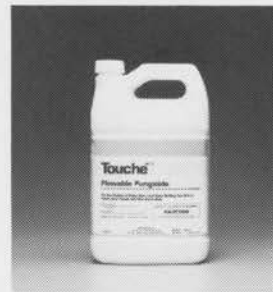
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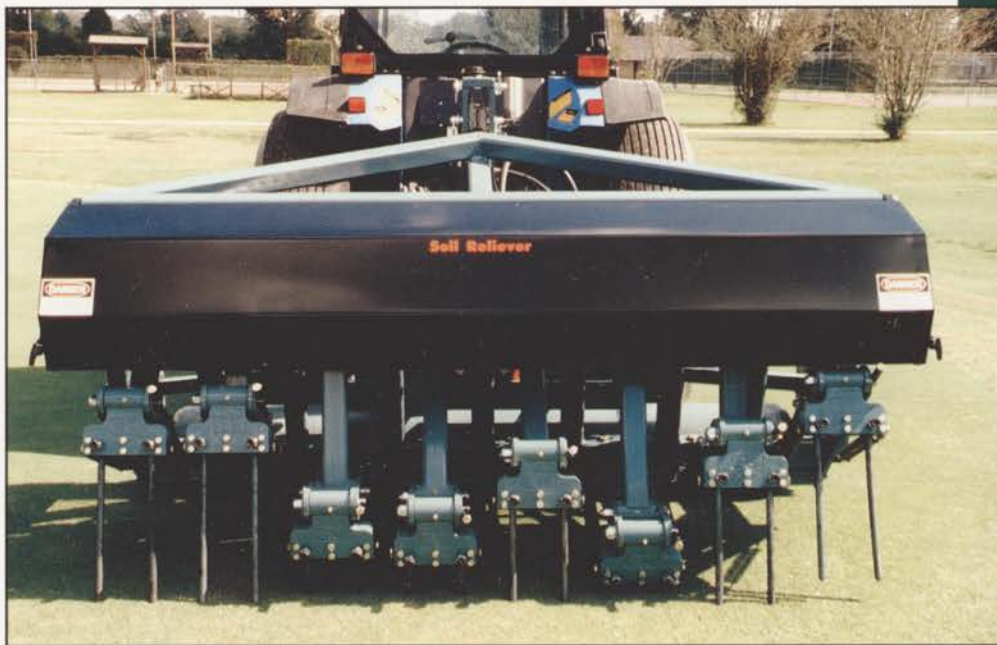
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With the increased foot traffic on sports turf and golf course, comes a higher level of maintenance. More water and more equipment, along with the increased foot traffic results in deeper compacted soil.

Simply put, plant roots require oxygen to thrive and grow. By relieving compaction with the Soil Reliever, you will have a root system at the depth you aerify. With deep roots, you get more wear tolerances with less stress, therefore, a healthier turf grass. Any agronomist will tell you that the best weed control, fungus control, and disease control is a healthy turfgrass.

With deep tine aerification, you minimize water use by reducing surface water run-off.

With a healthier turfgrass along with reducing surface compaction, you will decrease sports fields injuries by 40-60%.

The Soil Reliever can do all of this without any harm to the environment.



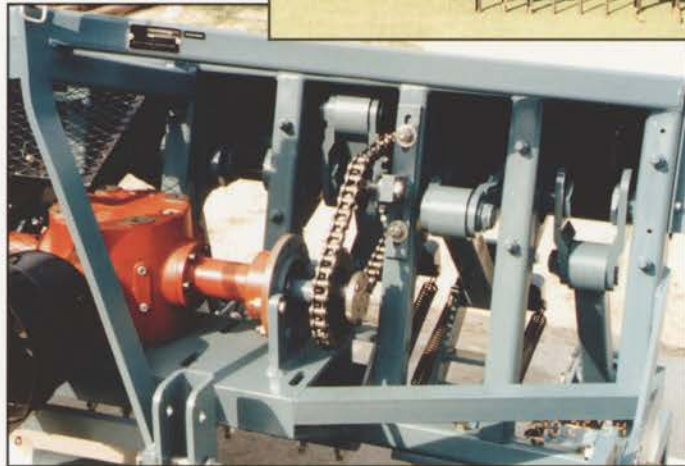
WITH THE SOIL RELIEVER YOU GET:

- A deep tine aerifier that will work on most tractors.
- High production.
- Fewer parts.
- Durability.
- Less maintenance.
- Fewer costly repairs.
- Even hole spacing.
- Operation visibility of all working parts.
- Easy operation.
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- Less Vibration.
- Anti-head flipping devices.
- Roller scraper.
- Storage stands.

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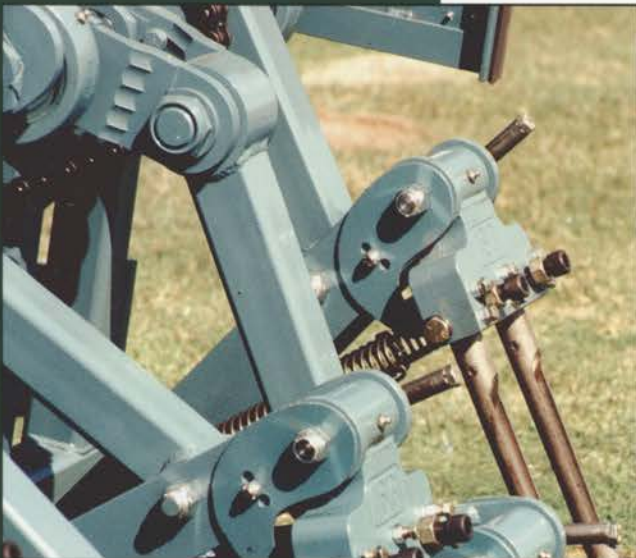
WHERE TO USE THE SOIL RELIEVER

- Sports Fields
 - Golf Courses
 - Parks & Playgrounds
 - Under Trees
 - Race Tracks
 - Sod Farms
- Anywhere Severe Soil Compaction Occurs



WE ARE FAST!

The Soil Reliever has two separate crankshafts, each half being driven from the center. This reduces torque, allowing the machine to turn faster. In other words, one crank drives the other. The longer the line, the greater the torque required to drive the far outside. By driving both directions we reduce power requirements and vibration.



HOW IT WORKS

As the tractor moves forward and the tines (being solid or coring) enter the soil at a perpendicular line, while the tractor p.t.o. is engaged, this creates a lifting effect by displacing the soil upward from the forward motion of the tractor while the tines are in the soil. This described effect relieves compaction of the soil at a depth of the tine penetration used.

The longer the tines are in the soil, the greater the lifting effect causing a more disruptive surface.

The Soil Reliever simply gets the tines in and out of the soil faster, minimizing the lifting action, and leaving a smoother surface.

The Soil Reliever's frame design adds leverage and places more weight at the tine heads. The Soil Reliever's crank design turns faster giving a bigger and faster "hammer" which results in more soil penetration.

We all know that the bigger the hammer, and harder the blow, the further you drive the nail.

The SOIL RELIEVER

Deep Tine Aerifier

SPECIFICATIONS

	MODEL 60	MODEL 80
Machine Weight	1930 lbs.	2575 lbs.
Working Width	60"	80"
Working Depth Maximum	16"	16"
Overall Dimensions-LXWXH	43" L, 66" W, 50" H	43" L, 88" W, 50" H
Tine Head Angle	Adjustable	Adjustable
Hole Spacing on Machine	3-1/3 to 5"	3-1/3 to 5"
Hole Spacing on Ground**	3" to 5"	3" to 5"
Square Foot Per Hour (Greens)	14,000	17,000
Fairway Acre Per Day @ 4" Spacing	4-Approximate	6-Approximate
@ 6" Spacing	6-Approximate	9-Approximate
Recommended Tractor Size	30 H.P. Minimum	45 H.P. Minimum
Recommended Tractor Speed @ 540 RPM	.90-1.4 MPH	.90-1.4 MPH
Actual Working Speed @ 400 PTO RPM	.60-.80 MPH	.60-.80 MPH
Working P.T.O. Speed	400-450 RPM	400-450 RPM
Lift and Drive System	3-Point Lift, P.T.O. Driven	3-Point Lift, P.T.O. Driven
Top Link	Manual, Hydraulic-Optional	Manual, Hydraulic-Optional

*may need creeper gear for 3-1/3" spacing.**

Warranty: The Soil Reliever has a 6 month warranty against any defective parts or workmanship.

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Hydraulic Top Link
Rear Roller
All Weather Cover

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1/2" x 12"
1/2" x 14"
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3/4" x 12"
3/4" x 14"
7/8" x 12"

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5/8" x 7"
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Future Developments in Golf Course Irrigation

by David Beck, P.E.

Over the past 20 to 30 years, irrigation on golf courses has made many strides toward providing an optimum growing environment for turf and landscape ornamentals. Computer applications have transformed golf course irrigation into complex and expensive water management systems which, when taken to the extreme, can be operated virtually without human input.

However, inherent problems continue to plague modern golf course irrigation in continuing challenges to equipment application and system design. High water application rates, high-pressure requirements, poorly scheduled water application, improper and inadequate operator training and poor system design, construction and maintenance combine to produce irrigation inefficiencies. Elements of one or more of these problems can be found on almost every golf course. Water restrictions, energy costs and environmental regulations will require solutions to these problems or construction may simply be forbidden on many projects.

Precipitation rate refers to the rate at which a sprinkler delivers water to the ground surface. To reduce the number of heads on the golf course, large heads were developed which were intended to throw water relatively long distances (60 to 100 feet), and, therefore, large volumes of water must be used to cover the distances between the sprinkler heads. The streams of water deliver average rainfall or precipitation rates which exceed the rate at which water can be taken into the soil. A classic symptom of this problem can be seen on most golf courses with slopes or mounds, often brown on the top of mounds and on slopes while low

areas are marshy. Water is simply applied too fast on the slopes and runs to and collects in the low areas.

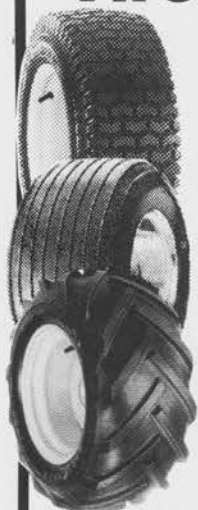
Related to the high application rates are the required water pressures needed to throw water the long distances between heads. The pressure energy is converted to velocity energy into the sprinkler's nozzle, allowing the water droplets to carry the 65 to 100 feet between sprinkler heads. Water pressure and power costs are directly related. If we can cut the pump station output pressure from 120 pounds per square inch (psi) by one-third to 80 psi, power costs will drop equally. With today's rising power costs and uncertain energy future it is mandatory that today's irrigation systems use as little water as possible. Ten-cent per kilowatt hour energy today may double, triple or rise even higher over the 20- to 40-year life of the irrigation system. The new low-pressure, low-precipitation technology will reduce your initial sprinkler irrigation costs by as much as one-third, and your operating costs by nearly the same. For now, the new technology can be used to minimize impacts on environmentally sensitive areas where golf courses may not otherwise be constructed.

A hidden benefit of reduced operating pressure is a longer system life. Since pipes, fittings, valves and other components have less stress with low-pressure systems, irrigation components last longer and require less maintenance. Reduced class pipe also may be used with low-pressure systems, resulting in

A hidden benefit of reduced operating pressure is a longer system life. Since pipes, fittings, valves and other components have less stress with low-pressure systems, irrigation components last longer and require less maintenance.

continued on pg. 17

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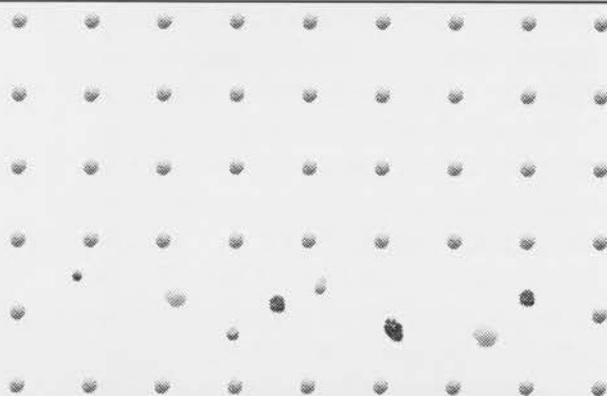


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lower system material costs.

Manufacturers are now providing sprinkler heads which offer similar or improved water distribution found with high-pressure sprinklers but do so with lower pressure and lower precipitation rates. These new sprinklers use one nozzle instead of two, resulting in one stream of water. With the lower pressures and single nozzles, sprinkler flow rates are reduced, resulting in lower application rates. If application rates can be reduced to meet soil intake rates, irrigation water will no longer run to low areas, resulting in higher distribution efficiencies.

Besides the obvious benefits (longer life, less water consumption, less energy consumption, etc.) of low-pressure and low-application rates systems, there are also several less obvious cost saving benefits. Low precipitation sprinkler heads, with the smaller potential to produce runoff, can be installed on a block or battery type system where several (up to six or seven heads) operate off a single valve. With the new sprinkler heads, far less differential adjustment in sprinkler head water is required eliminating the need for valve in head control. If a sprinkler adjustment is required, nozzle sizes will be changed instead of sprinkler run times. The adjustment is much more permanent and far less likely to be misadjusted during future system operation.

Block systems were common in the sixties and seventies; but with only high-application sprinklers available, irrigators were forced to develop the valve in

head sprinklers to deal with effects of high precipitation rates. There will now be a trend back to block type systems since they result in fewer valves, fewer controllers, less expensive and simpler heads, smaller pipes with smaller sprinkler

flow requirements, less maintenance due to fewer components and simpler equipment, all resulting in substantially reduced overall system costs. Future valve in head systems will use sprinklers which

continued on pg. 23

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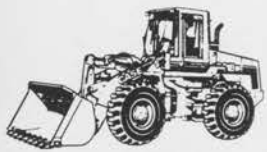
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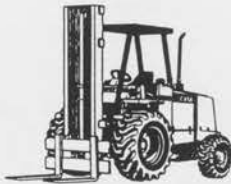
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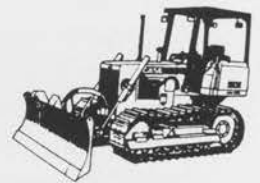
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I'd Like to Help, But...

by Jane St. John, CGCS, Heather Hills Golf Club

How many times have you been asked to help on a project, give your input on a committee or maybe even help solve a problem in your neighborhood? What was your response to those seeking your help? Did you give the usual, "I can't find the time right now" or maybe the other favorite excuse, "I really don't have anything to contribute." Why did you really choose not to get involved?

In today's society, people tend to be wrapped up in their own world and their own problems. The thought of helping someone else is not a priority in our busy lives. But when we volunteer our time and talents, who is really benefiting from the effort? Surely the organization we are involved with benefits, but have you ever thought about the value of such experience to the volunteers?

"Okay, I will help you out on that committee after all. But first tell me how this will help me in my daily life." What will this volunteering do for me? Well for starters, let's look at the professional benefits.

As a golf course superintendent, you may be called upon to speak at Greens Committee meetings, membership meetings and, of course, you will have to talk to the angry golfer who wants to know why you had to poke all those holes in the greens just when they were putting perfect.

Volunteering in diverse areas will give you exposure to many different types of people from many walks of life. You can see how other people do things, how they view what we do and how they solve problems. You may have the chance to do some public speaking, work on your organizational abilities and polish your people skills. You will learn to put your ego aside and work together with a group of people who may not have very much in common. Your problem-solving skills will be sharpened by having this opportunity to work together.

In order to achieve any of these benefits, however, you must first ask yourself, "What do I really want?" You must evaluate your strengths and weaknesses, which is often an unpleasant task. When we are forced to be honest with ourselves, we may find that we don't like what we see. But once evaluated, we can set about using our strengths and improving our weak-

nesses. The results can include an improved personal and professional image and a real feeling of accomplishment.

By exposing ourselves to other people and other ways of doing things, we also will expand our horizons and become a more rounded person. We become more interesting to our friends, spouses and colleagues. New friends and contacts prove to be long lasting and productive.

Longtime volunteer Tom Mason helped to dispel the argument, "I can't find the time." Tom feels that when a person claims to not have the time, what they are really saying is that they choose not to find the time. It is not important enough to them to find the time. What they really should be saying is that they are not interested in investing their time right now. "If you choose not to become proactive, you lose the right to complain about a situation," Tom said. He believes many people in today's world find that after they climb the ladder of success, it was leaning on the wrong wall all along. Busy with their careers, they fail to take a proactive stance in other areas of their lives. Family, friends and outside interests are of vital importance to a well rounded person.

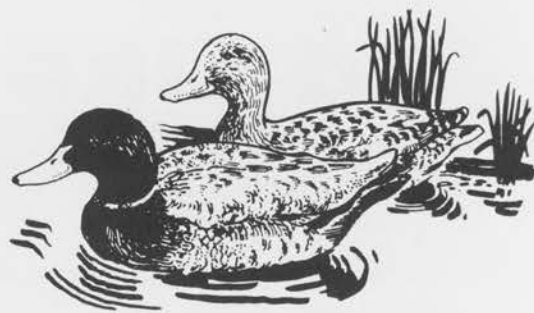
One of Tom's favorite projects is currently underway. As a member of the Chapter Relations committee for the GCSAA, he is helping to bring about many changes in the ways that local chapters communicate with the national chapter. They are working to improve the feeling of belonging, trying to make the local chapters feel as if they really are a part of the national. This is, of course, no small task, one that Tom feels is vital to the continued success of our profession. We must continue to improve our image, educate the public and lead our profession. To achieve these goals, we must be the best people we possibly can, both as individuals and as a group. We must be able to give our time and use our skills without expecting something in return. Finally, we must have a clear vision of what we really want to achieve.

With all the benefits we can realize through volunteering, why aren't we all lining up to help? Give of your time and skills. You will be amazed at the results.



Wildlife Management

by Steven J. Sump,
Superintendent Rouge Golf Course



Wildlife management is a trend that, for various reasons, is increasing every day on golf courses around the country. With construction on the rise, and the suburbs stretching farther out to the countryside, animals and birds are being encroached upon, and some species even face extinction. The natural settings that golf courses offer are a perfect haven for wildlife, while the golfers and club guests get the opportunity to enjoy the great beauty of animals and birds in their natural habitat.

There are different ways to attract wildlife to your golf course. Over the past few years, design, construction and management practices have been changing to accom-

modate wildlife. Although there are numerous ways to enhance wildlife on your golf course, there are several rules you must follow to be successful. Wildlife require suitable habitat in order to survive. Habitat is comprised of four components: space, water, food and cover.

Space is the component you have the least control of. Landscaping with plants of high wildlife food value and building nesting boxes, ponds or naturalizing areas will reduce the amount of living space required by an individual animal. It also will increase the chance of attracting wildlife to your property. Space is not as critical, however, when you manipulate the other components.

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Providing food is usually the first activity that comes to mind when planning for wildlife. Bird feeders or landscape plants that are fruit, nut or seed bearing will help attract wildlife. Some things to consider when creating food sources are food preferences of different species, fruiting habits and seasonal availability of plants. Natural areas also are beneficial in providing insect sources for many animals.

Cover is the part of an animal's habitat that provides protection for breeding, nesting, sleeping, resting, feeding and travel. If it is not possible to have large areas of cover available at your course, small areas connected by corridors of grasses or hedge rows can be implemented so animals seeking food and water can travel safely between areas.

Dead trees (snags) provide important shelter and nesting sites for both mammals and cavity nesting birds. When they pose no safety hazard, they should be left in place. If you cannot leave snags, construct nesting boxes. Creating brush piles in woodlots will help enhance the habitat for mammals.

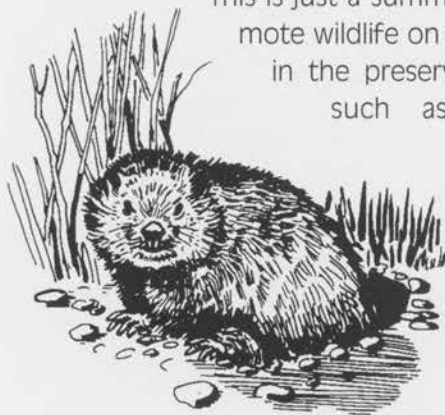
You also must consider the arrangement of the elements of habitat (food, water and cover). If you provide food and cover, locate them near water so you complete the habitat requirements.

The most diverse the habitat on your golf course, the more species of animals you will attract. In other words, try to create various distinct habitat types.

While you are manipulating habitat to wildlife, habitat also can be manipulated to deal with problem wildlife. If you have having trouble with a particular species, find out which aspects of your habitat are helping it thrive. By knowing this, you can eliminate some of the factors conducive to problem wildlife, and hopefully eliminate them.

This is just a summary of factors necessary to promote wildlife on your golf course. In order to aid in the preservation of wildlife, organizations such as the New York Audubon

Cooperative Sanctuary System have been founded. You may obtain additional information on promoting wildlife on your golf course by contacting the organization and requesting additional information.



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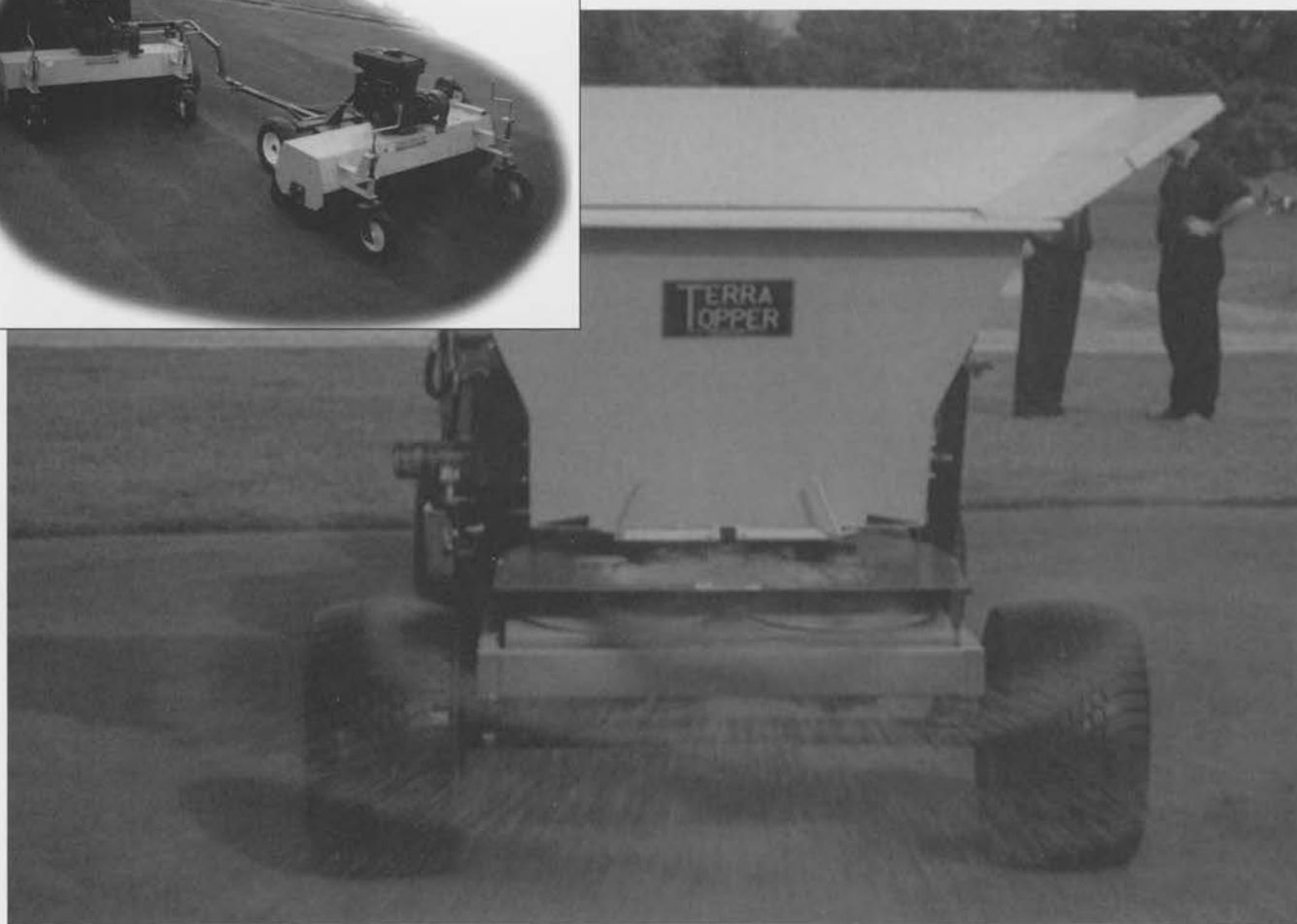
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require lower pressures and provide reduced application rates.

Poor irrigation scheduling is common on golf courses due to lack of water use information. Currently, instruments, such as weather stations, which measure turfgrass water use, are found only on high-end courses due to their relatively high cost. However, the cost of these devices is dropping as new technology emerges. Water use simulators and soil sensors will become more widely used as their cost diminishes and the technology proves its worth. These instruments measure directly or indirectly the exact water requirements of the turf and other landscape plants on a daily basis and provide the superintendent with exact water use data. By setting the irrigation system to return only the amount of water required to meet the planned needs, irrigation efficiency improves.

Permitting of future golf projects will be achieved by drawing on new technology and innovative irrigation techniques. Low-pressure, low-precipitation systems will become the norm as the industry realizes the benefits which come without diminished performance. The days of anything goes with irrigation are nearing an end. High prices on irrigation systems, lingering problems with existing technology and drive for environmentally sensitive projects will change the future of irrigation. Certainly complicated and expensive valve in head computer control systems are here to stay in the immediate future; however, golf course irrigation is

still in its infancy. Most existing technology is less than 25 years old and there is enormous room for improvement.

David Beck is president of David B. Beck & Associates, an irrigation consulting firm based in Ann Arbor, Mich.

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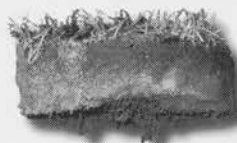
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"Hello, Kate. It's Pete Miller."

"Hi, Pete. How're things?"

"Unbelievably busy! Feel like I'm drowning over here."

"You're not alone. I hear that from all the guys. I still hope you'll be attending the next meeting?"

"Yeah. That's why I called. I'll need a break. And I'd really like to see the other guys. So, put me down for golf and dinner."

"Well, Pete. If you look closely at the flyer...we've changed the procedure for making reservations."

"Oops! I knew that! Just habit, I guess."

"That's O.K. Remember to keep the flyer. It's got all the info on it. And...Mail in the entry form with your check."

"What about a receipt? Can I get one from you?"

"The entry form also is a receipt. See the number in the right-hand corner? Just make a copy for your records."

"Great!...But, what if I can't make it after all. You just never know what might happen around here."

"Oh, just call me to cancel before the meeting date. We really will try to accommodate those unavoidable cancellations."

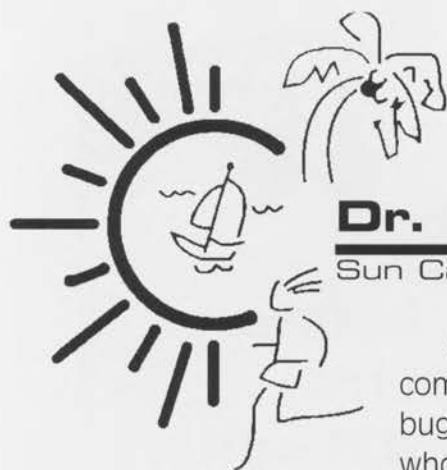
"Oh, good How're the guys handling the new policy?"

"Oh, they've been just great. Really helps out at registration. I think everybody's pleased with the results."

"Glad to hear it. Takes a little adjusting to...But, I think it's a good change...Well, got to get back to work. Thanks, Kate."

"Anytime, Pete."

Kate Mason is Executive Secretary of MBCGCSA,
(810) 362-1108



Dr. Bert's Squirt

Sun Care Products

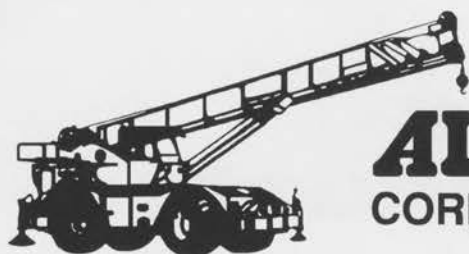
New Products

Dr. Bert's Squirt is a new non-oily sunscreen and outdoor protection that combines an SPF 15 sunscreen with natural ingredients that will not attract bugs. The spray was developed by Albert K. Pierce, M.D., a plastic surgeon, who said, "As an active outdoorsman myself—golfing and fishing—I was tired of putting on a greasy sunscreen and then having to put on an oily or smelly bug repellent. With chemists, I experimented to develop a product that would be effective and easy to apply."

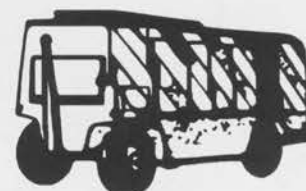
Dr. Bert's Squirt comes in a 2-oz. size, which retails for \$6.97, and an 8-oz. refill (\$9.97.) It can be purchased at all English Gardens stores; Pro Golf Stores in Livonia, Redford, Royal Oak, Roseville and Lakeside; Nevada Bob's in Rochester Hills and Sterling Heights; and C.J. Barrymore's in Clinton Township. For more information, call (800) 876-3511.

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